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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Timothy Allen et al	Group Art Unit: 3682
Serial No.: 10/706,661	Confirmation No.: 7278
Filed: 11/12/2003	Examiner: Kim, Chong Hwa
For: Transmission and Transfer Case Having Integrated Lubrication Systems	Atty. Docket: 81074236

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RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF

Honorable Sir:

This is response to the Notification of Non-Compliant Appeal Brief, mailed April 12, 2007. The enclosed Appeal Brief has been amended to identify and map all independent claims on appeal to the specification by page and line number and/or drawings, as stated in the Notification. A Notice of Appeal and an Appeal Brief were transmitted by facsimile to the Patent and Trademark Office on April 17, 2007. Please disregard the Appeal Brief transmitted on April 17, 2007 and substitute therefor the Appeal Brief transmitted with this Response.

(i) Real Party in Interest

Ford Motor Company, a Delaware corporation, is the real party in interest.

(ii) Related Appeals and Interferences

The Applicants, and Applicants' legal representative and assignee are unaware of any application, patent, prior or pending appeals, interferences or judicial proceedings that may relate to, directly affect, or be directly affected by or have a bearing on the Board's decision in this appeal.

(iii) Status of Claims

The claims involved in this appeal are claims 1-17. Each of these claims stands rejected. No claim has been withdrawn. No claims stand objected to.

(iv) Status of Amendments

An amendment filed after the final rejection on January 2, 2007 seeking to place the application in condition for allowance or in better form for this appeal was not entered according to an Advisory Action dated January 29, 2007.

(v) Summary of Claimed Subject Matter

The elements of independent claim 1 are identified and mapped to the specification by page and line number and by reference to element numbers shown in the drawings, as follows:

1. A system, for lubricating components of a drive line, is adapted to drive the wheels 10, 12 of a motor vehicle (pg. 4, ll. 35-37), the system comprising:

a power transmission 14 (pg. 4, ll. 37- pg. 5, ll. 1) includes a first output 38 (pg. 5, ll. 17- 21);

a first lubrication circuit comprises various fluid passages and components including pump outlet 144, passages 146, radial passage 148, 150, axial passage 158, balance dam 160, axial passage 162, carrier 56, stub shaft 54, radial passage 164, balance dam 166, axial passage 168 and radial passage 170 (pg. 9, ll. 21-33);

a second lubrication circuit comprises various fluid passages and components including a pump outlet 122, radial passage 124, axial passage 126, and passages 128, 130, 132 to bearings and support surfaces in the transmission. (pg. 8, ll. 35 - pg. 9, ll. 10);

a first sump 112 contains hydraulic fluid (pg. 8, ll. 21-25);

a transfer case 16, adapted for a drive connection to the first output 38 (pg. 5, ll. 2-8), includes a second sump 110 containing hydraulic fluid (pg. 8, ll. 5-8), and a second output 88, 114 (pg. 7, ll. 8-18), which is driveably connected to at least one of the driven wheels 10, 12;

a first pump 120 is driveably connected to the second output 88, 114 and is hydraulically connected to the first sump 112 (pg. 9, ll. 19-21) and the first lubrication circuit (pg. 9, ll. 15-33); and

a second pump 118 (sometimes called a scavenge pump) is driveably connected to the second output 88,114 and is hydraulically connected to the second sump 110 and the second lubrication circuit (pg. 8, ll. 27- pg. 9, ll. 13).

The elements of independent claim 6 are identified and mapped to the specification by page and line number and by reference to element numbers shown in the drawings, as follows:

6. A system, for lubricating components of a drive line, is adapted to drive the wheels 10, 12 of a motor vehicle (pg. 4, ll. 35-37), the system comprising:

an input 38 (pg. 5, ll. 17-21);

a first output 56, 80 (pg. 7, ll. 1-4) is driveably connected to the input 38 (pg. 6, ll. 21-34);

a first sump first sump 112 contains hydraulic fluid. (pg. 8, ll. 21-25);

a first lubrication circuit comprises various fluid passages and components including pump outlet 144, passages 146, radial passage 148, 150, axial passage 158, balance dam 160, axial passage 162, carrier 56, stub shaft 54, radial passage 164, balance dam 166, axial passage 168 and radial passage 170 (pg. 9, ll. 21-33);

a first pump 120 is driveably connected to the second output 88, 114 and is hydraulically connected to the first sump 112 (pg. 9, ll. 19-21) and the first lubrication circuit (pg. 9, ll. 15-33); and

a second pump 118 is driveably connected to the second output 88,114 and is hydraulically connected to the second sump 110 and the second lubrication circuit (pg. 8, ll. 27- pg. 9, ll. 13).

The elements of independent claim 13 are identified and mapped to the specification by page and line number and by reference to element numbers shown in the drawings, as follows:

13. A method for supplying lubrication to a transmission 14 and transfer case 16 (pg. 4, ll. 35- pg. 5, ll. 15), the transmission 14 and transfer case 16 each having a sump 112 (pg. 8, ll. 21-25), 110 (pg. 8, ll. 5-8) containing hydraulic fluid, the transfer case 16 having an output 56, 80 (pg. 6, ll. 21-34) (pg. 7, ll. 1-4) or output 88,114 (pg. 7, ll. 8-18), adapted for a drive connection (pg. 7, ll. 1-4) to at least a first set of driven wheels 10, 12 of a motor vehicle (pg. 4, ll. 35-37), the method comprising the steps of:

driveably connecting a first pump 120 and a second pump 118 to the output 114 (pg. 9, ll. 35 - pg. 10, ll. 11);

defining a first circuit comprising various fluid passages and components including pump outlet 144, passages 146, radial passage 148, 150, axial passage 158, balance dam 160, axial passage 162, carrier 56, stub shaft 54, radial passage 164, balance dam 166, axial passage 168 and radial passage 170. (pg. 9, ll. 19-33) for carrying lubrication fluid in the transfer case 16;

defining a second circuit comprising various fluid passages and components including a pump outlet 122, radial passage 124, axial passage 126, and passages 128, 130, 132 to bearings and support surfaces in the transmission. (pg. 8, ll. 35 - pg. 9, ll. 10) for carrying lubrication fluid in the transmission 14;

hydraulically connecting the first pump 120 to the transmission sump 112 and to the first circuit (pg. 9, ll. 15-33); and

hydraulically connecting the second pump118 to the transfer case sump 110 and to the second circuit (pg. 8, ll. 35-pg. 9, ll. 13).

(vi) Grounds of Rejection to be Reviewed on Appeal

1. Whether the drawings should be objected to under 37 CFR 1.83(a). The final rejection alleges that the drawings fail to show the first lubrication circuit and the second lubrication circuit as recited in the claims.

2. Whether the specification should be objected to under 35 U.S.C. 132(a). The final rejection alleges that the specification introduces new matter into the disclosure.

3. Whether claims 1-17 should be rejected under 35 U.S.C. 112, first paragraph, for allegedly failing to comply with the enablement requirement. The final rejection alleges that the specification and drawings fail to show circuit connections between the sumps and the pumps and concludes that "it is not clear exactly how the circuit connections are made."

4. Whether claims 1-17 are unpatentable under 35 U.S.C. 103(a) over U. S. Patent 5,115,887 of Smith (the '887 patent) in view of U. S. Patent 5,702,319 of Baxter, Jr. (the '319 patent).

(vii) Argument

1. Whether the drawings should be objected to under 37 CFR 1.83(a). The final rejection alleges that the drawings fail to show the first lubrication circuit and the second lubrication circuit as recited in the claims. The drawings stand objected to on this basis without the examiner pointing out specifically where the drawings allegedly fail to support the claims, thereby leaving the applicants to guess regarding the source of the difficulty to which the examiner refers.

Figures 2A and 2B illustrate, as recited in the claims, and the specification describes that the first lubrication circuit is both connected to the first pump 112 and supplies fluid lubricant to components of the transfer case, as follows:

> Lube pump 120 continually draws hydraulic fluid from the transmission sump 112 and supplies relatively cool transmission fluid for lubrication purposes to a lubrication circuit located in the transfer case 68. Fluid from sump 112 flows through passages 140, 142 to the inlet of lube pump 120, located adjacent scavenge pump 118 and also driven by sleeve shaft 114. The outlet 144 of pump 120 is hydraulically connected through passages 146, 148, 150 to various radial and axial passages that lead to components of the transfer case. Radial passage 148 directs lubricating fluid to the friction discs and spacer plates of clutch 60 and brake 62, through axial passage 158 to balance dam 160, and through axial passage 162 to carrier 56 and stub shaft 54. Radial passage 164 directs lube fluid to balance dam 166 and to the discs and spacer plates of clutch 82. Axial passage 168 and radial passage 170 carry lube fluid to the bearing 172 that supports output shaft 80 on case 16. (pg.9, ll. 15-33)

Figures 2A and 2B illustrate, as recited in the claims, and the specification describes that the second lubrication circuit is both connected to the second pump 110 and supplies fluid lubricant to components of the transmission, as follows:

> Pump 118 has an output 122, which is connected by a radially directed passage 124 to an axial passage 126 formed in transmission output shaft 38 and an intermediate shaft 127. Passage 126 supplies hydraulic fluid from pump 118 through various axial and radial passages 128, 130, 132 to the bearings and support surfaces of rotating components located in the transmission case 14. In this way hydraulic fluid is continually drawn from the transfer case sump 110 and is supplied by pump 118 to a lubrication circuit located in the transmission case. Pump 118 is driven continually by positive engine torque or,

when the engine is stopped, by negative torque from the rear drive wheels. (pg. 8, ll. 35 – pg. 9, ll. 13)

From these descriptions, which refer to elements identified by numbers in the drawings, it can be seen that the drawings do provide support for the recital in the claims regarding the first and second lubrication circuits. A practitioner of ordinary skill in the relevant art would clearly see exactly how the circuits connect pumps 118 and 120 to the components that are being lubricated by fluid supplied through the circuits.

Due process requires the examiner to point out specifically where the drawings allegedly fail to support the claims, so that applicants can respond accordingly without having to guess regarding the source of the difficulty to which the examiner refers.

2. Whether the specification should be objected to under 35 U.S.C. 132(a). The final rejection alleges that the specification introduces new matter into the disclosure.

In response to an objection to the specification in the first Office action, applicants proposed an amendment to the specification and Figure 2A. The amendment inserted the reference number "113" in Figure 2A and changed a sentence to read:

> The inlet of scavenge pump 118 is hydraulically connected through passages ~~111~~ to the inlet 113 of sump 110.

In the final rejection, the examiner required applicants "to cancel the new matter in the reply to this Office Action." The new matter reference relates to "the inlet 113." In the reply, applicants canceled "the inlet 113" from the sentence, but the responding Advisory Action refused to enter the previously required amendment.

Applicants have in this way attempted to place the application in better condition for this appeal by removing the controversial phrase from the specification. The proposed amendment should have been entered. If it had been entered it would

have removed this issue from the appeal. Applicants respectfully request the Board to order entry of the amendment, at least with respect to its deleting the phrase "the inlet 113" from the sentence at issue.

The Amendments to the Specification proposed by applicants in the response dated January 2, 2007, merely identify more clearly the lubricating circuits by inserting references to "the first lubrication circuit" and "the second lubrication circuit" at appropriate places in the paragraphs that begin at page 8, line 5; page 8, line 35; and page 9, line 15. These changes add no new matter and should have been entered because they clarify the issue regarding the first and second circuits, which the examiner had referred to repeatedly. Applicants respectfully request the Board to order entry of the amendment, at least with respect to the amendments to specification that to "the first lubrication circuit" and "the second lubrication circuit" at appropriate places in the paragraphs that begin at page 8, line 5; page 8, line 35; and page 9, line 15.

3. Whether claims 1-17 should be rejected under 35 U.S.C. 112, first paragraph, for allegedly failing to comply with the enablement requirement. The final rejection alleges that the specification and drawings fail to show circuit connections among the sumps and pumps and concludes that "it is not clear exactly how the circuit connections are made."

Regarding the first pump 120 and first sump 112, the specification says, with reference to Figure 2A:

> Lube pump 120 continually draws hydraulic fluid from the transmission sump 112 and supplies relatively cool transmission fluid for lubrication purposes to a lubrication circuit located in the transfer case 68. Fluid from sump 112 flows through passages 140, 142 to the inlet of lube pump 120, located adjacent scavenge pump 118 and also driven by sleeve shaft 114. (pg.9, ll. 15-21)

Figure 2A illustrates axial passage 140 in communication with the first sump 112 and axial passage 142 leading to the inlet of first pump 120.

Regarding the second pump 118 and second sump 110, the specification says, with reference to Figures 2A and 3A:

> The transfer case 16 contains a hydraulic fluid or oil sump 110, where hydraulic transmission fluid can accumulate at a relatively low elevation of the transfer case. (pg. 8, ll. 5-8)
>
> The inlet of scavenge pump 118 is hydraulically connected through passages to sump 110. (pg. 8, ll. 35, 36)

Figure 2B illustrates a passage whose end is submerged in oil contained in sump 110, and Figure 2A shows the outlet of second pump 122 supplying fluid to passages 124 and 126 of the second lubrication circuit.

The specification describes and Figures 2A and 2B show the first sump 112 and second sump 110 hydraulically connected by hydraulic passages to the inlet of the first pump 120 and second pump 118, respectively. A practitioner of ordinary skill in the relevant art would clearly see from the specification and drawings exactly how the circuit connections are made.

4. Whether claims 1-17 are unpatentable under 35 U.S.C. 103(a) over U. S. Patent 5,115,887 of Smith (the '887 patent) in view of U. S. Patent 5,702,319 of Baxter, Jr. (the '319 patent).

4.1 The Office action says that the '887 patent discloses two sumps 14, 16 connected to two circuits 56, 20 via two pumps 50, 54, and then acknowledges that the '887 patent fails to show two pumps connected to the output drive of the transfer case. The Office action says that the '319 patent shows a lubrication system comprising two pumps 72 and 50 driven by an output drive 14 of transfer case 10. The Office action then concludes that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the pump connection of the '887 patent with the common pump connection of the '139 patent in order to maintain constant lubrication whenever the vehicle is moving with or without the engine running.

4.2 Note that the Office action rejects each of Claims 1-17 without making any attempt to point out whether all the elements and limitations of any particular claim are taught or suggested by the cited prior art references. The examiner has failed to establish a *prima facie* case of obviousness in rejecting claims 1-17 under 35 USC 103(a).

4.3 The '887 patent describes operation of a system both when an engine is operating and during a towing condition, when the engine is not operating. When the engine is operating, passage 20 is pressurized, the spool of control valve 24 is moved leftward to the pressure-set position by pressure in passage 20, hydraulic fluid is drawn from sump 16 through valve 24 to the input of lube pump 54, and fluid is drawn from sump 16 through valve 24 and passage 30 to the input of scavenge pump 50. When the engine is operating, sump 16 alone supplies two pumps 50, 54.

When the engine is not operating during a towing condition, however, control valve 24 moves rightward to the spring-set position shown in Figure 1, where valve 24 blocks passage 32, thereby preventing a hydraulic connection between sump 16 and the inlet of scavenge pump 50. Valve 24 also blocks a connection between sump 14 and the input of lube pump 54. Hydraulic fluid is drawn from sump 16 through valve 24 and passage 34 to the inlet of pump 54. When the engine is not operating and the vehicle is being towed, sump 16 alone supplies one pump 54.

The claims of the present application recite two pumps, a first pump driveably connected to the second output, and hydraulically connected to the first sump and the first lubrication circuit; and a second pump driveably connected to the second output, and hydraulically connected to the second sump and the second lubrication circuit. Therefore, the '887 patent teaches away from having both pumps 50, 54 hydraulically connected to the output of the transfer case because the '887 patent provides for the towing condition without requiring that each pump be driven from the transfer case output. The system of the '877 patent does not teach or suggest that first and second pumps are hydraulically connected to and supply fluid to first and second pumps. Yet the claims define the present application in these terms.

4.4 Furthermore, if the transfer case output were continually driveably connected to pumps 50 and 54 while the engine is not operating and the vehicle is being towed, passage 20 is not pressurized and valve 24 is placed in the spring-set position of Figure 1. With valve 24 in that position and pump 50 being driven from the output of the transfer case, the input of pump 50 would be cavitated because there is no connection between the input of pump 50 and any source of hydraulic fluid. This would be an inoperable, unacceptable condition because operating the pump with its input cavitated would quickly destroy the pump. The modification proposed by the examiner to the pump connection of the '887 patent with the common pump connection of the '319 patent renders the prior art unsatisfactory for its intended purpose; therefore, it cannot be used to reject the claims of this patent application. There is no basis for combining the teachings of the '887 patent with the dual pump drive taught by the '319 patent.

4.5 Neither the '319 patent nor the '887 patent disclose or suggest a lubrication circuit located to any extent in a transmission, as claim 4 recites.

4.6 Neither the '319 patent nor the '887 patent disclose or suggest a lubrication circuit located to any extent in a transmission, as claim 6 recites.

4.7 Neither the '319 patent nor the '887 patent disclose or suggest a transfer drive mechanism driveably connected to a first output and a second output, at least a portion of the drive mechanism located in relation to the first sump for movement through the fluid source, as claim 7 recites.

4.8 Neither the '319 patent nor the '887 patent disclose or suggest a clutch having a first set of friction elements driveably connected to the first output, and a second set of friction elements adapted driveably to engage and disengage the first set of friction elements, the clutch alternately driveably connecting and disconnecting the first output and second output, and a lubrication circuit further comprising fluid passages hydraulically connecting the lube pump to the first set of friction elements and second set of friction elements, as claim 8 recites.

4.9 Neither the '319 patent nor the '887 patent disclose or suggest a gearset including a sun gear, a ring gear, a carrier, and a set of planet pinions supported for rotation on the carrier, each pinion in meshing engagement with the sun gear and ring gear and journalled on a stub shaft supported on the carrier, or a lubrication circuit that includes fluid passages hydraulically connecting the lube pump to at least a portion of the components of the gearset, as claim 9 recites.

4.10 Neither the '319 patent nor the '887 patent disclose or suggest a bearing supporting the first output on the transfer case, or a lubrication circuit that includes fluid passages hydraulically connecting the lube pump to the bearing, as claim 10 recites.

4.11 Neither the '319 patent nor the '887 patent disclose or suggest a balance dam or a lubrication circuit that includes fluid passages hydraulically connecting the lube pump to the balance dam, as claim 11 recites.

4.12 Neither the '319 patent nor the '887 patent disclose or suggest a transfer drive mechanism including a first sprocket wheel journalled for rotation on the first output, a second sprocket wheel spaced from the first sprocket wheel and secured to the second output, and a drive chain driveably engaged with the first sprocket wheel and second sprocket wheel and located in relation to the first sump for movement through the fluid, as claim 12 recites.

4.13 Neither the '319 patent nor the '887 patent disclose or suggest a method step of defining a first circuit for carrying lubrication fluid in the transfer case and a second circuit for carrying lubrication fluid in a transmission; hydraulically connecting the first pump to the transmission sump and to the first circuit; and hydraulically connecting the second pump to the transfer case sump and to the second circuit, as claim 13 recites.

The '887 patent describes operation of a system both when an engine is operating and during a towing condition, when the engine is not operating. When the engine is operating, passage 20 is pressurized, the spool of control valve 24 is moved leftward to the pressure-set position by pressure in passage 20, hydraulic fluid is drawn from sump 16 through valve 24 to the input of lube pump 54, and fluid is

drawn from sump 16 through valve 24 and passage 30 to the input of scavenge pump 50. One sump, sump 16, supplies two pumps 50, 54.

However when the engine is not operating during a towing condition, control valve 24 moves rightward to the spring-set position shown in Figure 1, where valve 24 blocks passage 32, thereby preventing a hydraulic connection between sump 16 and the inlet of scavenge pump 50. Valve 24 also blocks a connection between sump 14 and the input of lube pump 54. Hydraulic fluid is drawn from sump 16 through valve 24 and passage 34 to the inlet of pump 54. One sump, sump 16, supplies one pump 54.

The claims of the present application recite two pumps, a first pump driveably connected to the second output, and hydraulically connected to the first sump and the first lubrication circuit; and a second pump driveably connected to the second output, and hydraulically connected to the second sump and the second lubrication circuit. Therefore, the '887 patent teaches away from having both pumps 50, 54 hydraulically connected to the output of the transfer case because the '887 patent provides for the towing condition without requiring that each pump be driven from the transfer case output. The system of the '877 patent does not teach or suggest that first and second pumps are hydraulically connected to and supply fluid to first and second pumps. Yet the claims define the present application in these terms.

4.14 Neither the '319 patent nor the '887 patent disclose or suggest the method step of defining a first circuit by establishing fluid passages connecting the first pump and a bearing located in the transfer case for supporting the output on the transfer case, as claim 14 recites.

4.15 Neither the '319 patent nor the '887 patent disclose or suggest the step of defining a first circuit by establishing fluid passages connecting the first pump and a clutch located in the transfer case for alternately driveably connecting and disconnecting the output and a second output, as claim 15 recites.

4.16 Neither the '319 patent nor the '887 patent disclose or suggest the step of defining a first circuit by establishing fluid passages connecting the first pump and a balance dam located in the transfer case , as claim 16 recites.

4.17 Neither the '319 patent nor the '887 patent disclose or suggest the step of defining a second circuit by establishing fluid passages connecting the second pump and a surface supporting rotating components located in the transmission, as claim 9 recites.

4.18 The rejection of claims 1-17 should be removed because the examiner has failed to establish a prima facie case of obviousness because: (1) the disclosures of '887 patent and the '319 patent could not be combined in an operable fashion; (2) the modification proposed by the examiner to the pump connection of the '887 patent with the common pump connection of the '319 patent renders the '887 system unsatisfactory for its intended purpose; (3) the '887 patent teaches away from the system that would result by combining the teachings of the '887 patent and the '319 patent; and (4) the Office action fails to point out whether all the elements and limitations of any particular claim are taught or suggested by the cited prior art references. The fact that references can be combined or modified is not sufficient to establish *prima facie* obviousness.

Combining the disclosures of the '946 patent and '149 patent neither teaches, discloses nor suggests the method or system defined by claims 1-9 and 17-19 of the subject application. Claims 1-9 and 17-19 should not be rejected as obvious in view of these prior art references.

(viii) Claims Appendix

We claim:

1. A system for lubricating components of a drive line adapted to drive the wheels of a motor vehicle, the system comprising:

a power transmission including a first output;

a first lubrication circuit;

a second lubrication circuit;

a first sump for containing hydraulic fluid;

a transfer case adapted for a drive connection to the first output, including a second sump for containing hydraulic fluid, and a second output adapted for a drive connection to at least one driven wheel;

a first pump driveably connected to the second output, hydraulically connected to the first sump and the first lubrication circuit; and

a second pump driveably connected to the second output, hydraulically connected to the second sump and the second lubrication circuit.

2. The system of claim 1, wherein the first lubrication circuit and the first pump are located in the transfer case.

3. The system of claim 1, wherein the first lubrication circuit is located at least partially in the transfer case.

4. The system of claim 1, wherein the second lubrication circuit is located at least partially in the transmission.

5. The system of claim 1, wherein:

the first pump and second pump are located in the transfer case;

the first lubrication circuit is located at least partially in the transfer case; and

the second lubrication circuit is located at least partially in the transmission.

6. A system for lubricating components of a drive line adapted to drive the wheels of a motor vehicle, the system comprising:

an input;

a first output driveably connected to the input;

a first sump for containing a source of hydraulic fluid;

a first lubrication circuit;

a lube pump driveably connected to the first output and hydraulically connected to the first lubrication circuit; and

a scavenge pump driveably connected to said first output and hydraulically connected to the first sump.

7. The system of claim 6, further comprising:

a second output;

a transfer drive mechanism driveably connected to the first output and second output, at least a portion of the drive mechanism located in relation to the first sump for movement through the fluid source.

8. The system of claim 6, further comprising:

a second output;

a clutch having a first set of friction elements driveably connected to first output, and a second set of friction elements adapted driveably to engage and disengage the first set of friction elements, the clutch alternately driveably connecting and disconnecting the first output and second output; and

the first lubrication circuit further comprises fluid passages hydraulically connecting the lube pump to the first set of friction elements and second set of friction elements.

9. The system of claim 6, further comprising:

a gearset including a sun gear, a ring gear, a carrier, and a set of planet pinions supported for rotation on the carrier, each pinion in meshing engagement with the sun gear and ring gear and journalled on a stub shaft supported on the carrier; and

the first lubrication circuit further comprises fluid passages hydraulically connecting the lube pump to at least a portion of the components of the gearset.

10. The system of claim 6, further comprising:

a bearing supporting the first output on the transfer case; and

the first lubrication circuit further comprises fluid passages hydraulically connecting the lube pump to the bearing.

11. The system of claim 6, further comprising:

a balance dam; and

the first lubrication circuit further comprises fluid passages hydraulically connecting the lube pump to the balance dam.

12. The system of claim 6, further comprising:

a second output;

a transfer drive mechanism including a first sprocket wheel journalled for rotation on the first output, a second sprocket wheel spaced from the first sprocket wheel and secured to the second output, and a drive chain driveably engaged with the first sprocket wheel and second sprocket wheel and located in relation to the first sump for movement through the fluid source.

13. A method for supplying lubrication to a transmission and transfer case, the transmission and transfer case each having a sump for containing hydraulic fluid, the transfer case having an output adapted for a drive connection to at least a first set of driven wheels, the method comprising the steps of:

driveably connecting a first pump and a second pump to the output;

defining a first circuit for carrying lubrication fluid in the transfer case;

defining a second circuit for carrying lubrication fluid in the transmission;

hydraulically connecting the first pump to the transmission sump and to the first circuit; and

hydraulically connecting the second pump to the transfer case sump and to the second circuit.

14. The method of claim 13, wherein the step of defining a first circuit, further comprises the step of:

establishing fluid passages connecting the first pump and a bearing located in the transfer case for supporting the output on the transfer case.

15. The method of claim 13, wherein the step of defining a first circuit, further comprises the step of:

establishing fluid passages connecting the first pump and a clutch located in the transfer case for alternately driveably connecting and disconnecting the output and a second output.

16. The method of claim 13, wherein the step of defining a first circuit, further comprises the step of:

establishing fluid passages connecting the first pump and a balance dam located in the transfer case.

17. The method of claim 13, wherein the step of defining a second circuit, further comprises the step of:

establishing fluid passages connecting the second pump and a surface supporting rotating components located in the transmission.

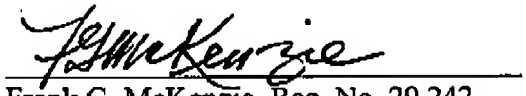
(ix) Evidence Appendix

No evidence was submitted pursuant to 37 CFR 1.130, 1.131 or 1.132, nor was any other evidence entered by the examiner and relied on by applicants in the appeal.

(x) Related Proceeding Appendix

No decision was rendered by a court or the Board in any proceeding related to appeals and interferences related to this application.

Respectfully submitted,
TIMOTHY ALLEN ET AL.



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